

Defense Information Infrastructure (DII)
Common Operating Environment (COE)
Software Version Description (SVD)
for the
METOC Observations Database (MDMETC) Segment
(Solaris Version)

Release 1.2.0.0

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Prepared for:
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1 SCOPE

1.1 Identification

This Software Version Description (SVD) describes the METOC Observations Database (MDMETC) Segment of the METCAST data distribution software, Release 1.2.0.0, developed by Fleet Numerical Meteorology and Oceanography Center (FNMOC), Monterey, CA. This software was compiled with the Defense Information Infrastructure (DII) Common Operating Environment (COE), software version 4.4. The software runs under the following hardware and operating system:

- Sun Enterprise 250 or higher computer running the Sun Solaris operating system, release version 2.8.

This document has been developed in accordance with the *DII COE Developer Documentation Requirements, Version 2.0*.

1.2 System Overview

METCAST is a standards-based, request-reply and subscription (channel) system for distributing weather information over the Internet using Hyper-Text Transfer Protocol (HTTP) and Multipurpose Internet Mail Extensions (MIME). The METCAST Server Segment is responsible for processing requests for data from METCAST Clients, interfacing with a database to attempt to satisfy each request, and formatting the retrieved data as specified in the request before returning the data to the client. The METCAST Client comprises a separate segment. The MDMETC segment provides the observations database for METCAST Server.

1.3 Product Information

1.3.1 Product Qualification

Test and Evaluation (T&E) of the software were performed at Fleet Numerical Meteorology and Oceanography Center (FNMOC), Monterey, CA, prior to delivery of the software.

1.3.2 Product Restrictions

Intellectual property rights to deliverables defined in this document are covered by the copyright license under the clause in DFARS 252.227-7013 (Nov. 1995).

1.3.3 Product Dependencies

MDMETC requires installation of Informix on the server. See the Installation Procedures for details.

The full METCAST Server installation requires three segments: MDCHNL (the METOC Channels segment), MDMETC (the observation database segment) and MCSRVr (METCAST Server itself). **These segments must be installed in the following order:**

1. MDCHNL
2. MDMETC (**NOTE:** This segment requires version **2.0.0.0 / 9.21** of the Informix Server Foundation (INFXSF) segment. If INFXSF 2.0.0.0 / 9.21 is not present on the system, this segment should not be installed. MCSRVr can still be installed, but will not have access to observations.)
3. MCSRVr (must be installed last, but requires MDMETC only if observations are to be processed).

2 REFERENCED DOCUMENTS

2.1 Government Documents

DDR-2 23 January 1998	<i>Defense Information Infrastructure (DII) Common Operating Environment (COE) Developer Documentation Requirements, Version 2.0, Defense Information Systems Agency, Joint Operability and Engineering Organization</i>
Unnumbered 18 June 1998	<i>Software Requirements Specification for METCAST, Space and Naval Warfare Systems Command, Environmental Systems Program Office (SPAWAR PMW-155), San Diego, CA</i>
fnmoc_MCSRVR_IP_32Series 10 August 2001	<i>Installation Procedures (IP) for the METCAST Server (MCSRVR) Segment, Release 3.2</i>
fnmoc_MDCHNL_IP_12Series 10 August 2001	<i>Installation Procedures (IP) for the METOC Channels (MDCHNL) Segment, Release 1.2</i>
fnmoc_MDMETC_IP_12Series 10 August 2001	<i>Installation Procedures (IP) for the METOC Observations Database (MDMETC) Segment, Release 1.2</i>
fnmoc_MDCHNL_SVD_1200 10 August 2001	<i>Software Version Description (SVD) for the METOC Channels (MDCHNL) Segment, Release 1.2.0.0</i>
fnmoc_METCAST_IP_15Series 04 June 2001	<i>Installation Procedures (IP) for the METCAST Client Segment, release 1.5</i>
fnmoc_METCAST_UM_1500 04 June 2001	<i>User Manual (UM) for the METCAST Client Segment, release 1.5</i>
fnmoc_METCAST_SVD_1500 04 June 2001	<i>Software Version Description (SVD) for the METCAST Client Segment, Release 1.5.0.0</i>

2.2 Non-Government Documents

None.

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3 VERSION DESCRIPTION

3.1 Inventory of Materials Released

All physical media and associated documentation for the METOC Observations Database Segment are listed below.

- METOC Observations Database Segment v1.2.0.0 Installation CD-ROM for the Sun Enterprise 250 or higher computer running DII COE 4.4 and the Sun Solaris operating system, release 2.8.
- METOC Observations Database Segment v1.2 Series Installation Procedures (IP), dated 10 August 2001.
- METOC Observations Database Segment v1.2.0.0 Software Version Description (SVD), dated 10 August 2001.

3.2 Inventory of Software Contents

A listing of all executables and environment files delivered is contained in Appendix A of this document.

3.3 Changes Installed

There are no SCRs for MDMETC v1.2; the only changes installed have been evolutionary minor bug fixes.

3.4 Waivers

There are no waivers associated with this software.

3.5 Adaptation Data

There are no site-specific data for the METOC Observations Database segment.

3.6 Installation Instructions

The METOC Observations Database Segment v1.2 Series Installation Procedures (IP) referenced in Section 2 of this document provide comprehensive installation instructions for the METOC Observations Database Segment. The fully installed segment occupies approximately 200 MB

of disk space. The software requires a minimum of 8 MB of RAM, with 24 MB recommended (above the operating system requirements).

3.7 Possible Problems and Known Errors

A lengthy query period for Upper Air Observations has been occasionally observed, which can lead to a backup in user requests and subsequently an overload of the Metcast Server System. This problem occurs only on the FNMOC server and not on the Regional Center Servers. Several improvements are in development to mitigate this problem.

4 NOTES

4.1 Glossary of Acronyms

COE	Common Operating Environment
DII	Defense Information Infrastructure
FNMOCC	Fleet Numerical Meteorology and Oceanography Center
GUI	Graphical User Interface
HTTP	Hyper-Text Transfer Protocol
INFXSF	Informix Server Foundation Segment
IP	Installation Procedure
IP	Internet Protocol
METCAST	METOC Broadcast
METOC	Meteorological and Oceanographic
MIME	Multipurpose Internet Mail Extensions
PC	Personal Computer
SRS	Software Requirements Specification
SVD	Software Version Description
T&E	Test and Evaluation
TCP	Transport Control Protocol
UM	User Manual

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APPENDIX A List of Executables and Environment Files

A.1 File Structure for Solaris v2.8 Delivery

```

/h/MDMETC
total 8
drwxr-x---  2 sysadmin other          512 Aug  9 12:59 Scripts
drwxr-x---  2 sysadmin other          512 Aug 10 15:57 SegDescrip
drwxr-x---  2 sysadmin other          512 Aug  8 18:19 bin
drwxr-xr-x  2 sysadmin other       1024 Aug  8 23:44 data

/h/MDMETC/Scripts:
total 6
-rwx-----  1 sysadmin other       2655 Aug  9 13:52 mk_dbspaces.ksh

/h/MDMETC/SegDescrip:
total 26
-rwxr-x---  1 sysadmin other       1496 Aug  8 21:51 DEINSTALL
-rw-r-----  1 sysadmin other        437 Aug  9 14:16 FileAttribs
-rwxr-x---  1 sysadmin other      3267 Aug 10 16:40 PostInstall
-rwxr-x---  1 sysadmin other        576 Aug 10 16:33 PreInstall
-rw-r-----  1 sysadmin other       119 Aug  9 14:03 ReleaseNotes
-rw-r-----  1 sysadmin other       944 Aug  9 22:51 SegInfo
-rw-r-----  1 sysadmin other       547 Aug  8 21:53 SegName
-rw-r-----  1 sysadmin other       206 Aug  8 21:53 VERSION
-rw-r--r--  1 root      other        131 Aug 10 15:57 Validated

/h/MDMETC/bin:
total 0

/h/MDMETC/data:
total 2804
-rw-r--r--  1 sysadmin other       3766 Sep  7  2000 CountryCode.unl
-rw-r--r--  1 sysadmin other     44298 Sep  7  2000 LLT-tables.sql
-rw-r--r--  1 sysadmin other    35216 Sep  7  2000 LLT-tables.sql1
-rwx-----  1 sysadmin other        117 Sep  7  2000 MetcastDB.sh
-rw-r--r--  1 sysadmin other     11386 Sep  7  2000 StaticTables.sql
-rw-r--r--  1 sysadmin other     30533 Sep  7  2000 StoredProc.sql
-rw-r--r--  1 sysadmin other    140374 Sep  7  2000 WMO_msg_types.unl
-rw-r--r--  1 sysadmin other        137 Sep  7  2000 adjust_dbs_names
-rw-r--r--  1 sysadmin other     32553 Sep  7  2000 airports.unl
-rwx-----  1 sysadmin other       2413 Aug  8 22:00 makeDB
-rw-r--r--  1 sysadmin other    1103038 Sep  7  2000 mslib.unl

```